

preprocessing means for preprocessing the biological information input by said biological information input device, and

a transmitting device for transmitting intermediate information preprocessed to said mobile storage device according to a request from said mobile storage device,

wherein said mobile storage device comprises:

a template of biological information,

a private key to be used for electronic authentication ,

comparing means for comparing said intermediate information with said template,

requesting means for requesting another intermediate information from said reader/writer according to said comparing result, and

means for making said private key available when said comparing result satisfies a predetermined criterion.

2. (Amended) A biometric authentication system according to Claim 1, wherein said biological information is fingerprint information,

wherein said preprocessing means in said reader/writer generates fingerprint image information necessary for a fingerprint identification as said intermediate information, and

wherein said comparing means in said mobile storage device performs the fingerprint identification by processing said fingerprint image information.

3. (Amended) A biometric authentication system according to Claim 2, wherein said template includes a plurality of coordinates of a featuring point of a registered fingerprint in said template and small images in the vicinity of said coordinates,

wherein said comparing means in said mobile storage device includes:
said registered fingerprint,

calculating means for calculating information for correcting a positional displacement between said registered fingerprint and an input fingerprint that is newly input by using a core position of the fingerprint,

requesting means for requesting said fingerprint image information in the vicinity of said coordinates to said reader/writer according to said coordinates of said featuring point and said information for correcting a positional displacement,

matching means for matching said small images in the vicinity of said coordinates and said fingerprint image information requested, and

judging means for judging said fingerprint being identical to said template according to the plurality of results obtained in said matching means.

4. (Amended) A biometric authentication system according to Claim 3, wherein said calculating means for calculating by using said core position of the fingerprint in said mobile storage device retrieves a normal vector of a plurality of ridges sequentially, and determines a position where a direction of said normal vector varies from a predetermined value as a core position of said fingerprint.

5. (Amended) A biometric authentication system according to Claim 2, wherein said comparing means in said mobile storage device includes:

calculating means for calculating information for correcting a positional displacement between a registered fingerprint in said template and an input fingerprint that is newly input by forming images having specific luminance distributions in the peripheries of individual featuring points with regard to the input fingerprint and the registered fingerprint, and by correlating said images therebetween,

retrieving means for retrieving a small image in the vicinity of a featuring point of said registered fingerprint by matching in the vicinity of coordinates of an image of said inputted fingerprint, that the positional displacement of the coordinates having been corrected, and

judging means for judging said fingerprint image being identical to said template according to the number of matched said small images.
